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IDENTIFIERS Consensus

ABSTRACT

The first meeting of the National Literacy Summit 2000 convened 150 leaders from adult education and literacy and other related fields for a 2-day intensive working meeting to begin building a national consensus on how to move adult and family literacy forward in the 21st century. Comments and suggestions offered by summit participants were synthesized into this revised summit paper and a draft action agenda. The following are among the topics covered in the revised paper: progress in adult literacy since publication of the report "Jump Start"; literacy's importance to individuals, families, the economy, and communities; and literacy services, client populations, and investment in literacy education in the United States. The action agenda identified seven challenges facing

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literacy, including the following: (1) higher standards in K-12 education and the phasing out of remedial courses at institutions of higher education will put more pressure on the already-strained adult education system; (2) demographic changes are increasing the demand for adult education and literacy services, making access to services a critical issue; and (3) adults need more opportunities to gain the skills and knowledge needed to meet changing job demands and succeed in the workplace. (Contains 31 references.) (MN)

NATIONAL LITERACY SUMMIT 2000

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LITERACY SKILLS FOR 21ST CENTURY AMERICA: A FOUNDATION FOR CREATING A MORE LITERATE NATION

PREFACE

This is the revision of the first document prepared for the National Literacy Summit 2000 – a document we now call the Summit Foundation Paper. The original paper was an attempt to launch the Summit process by providing background on the status of our field and some of the major challenges that confront us.

This revised paper tries to incorporate suggestions from many people in the field regarding the accuracy and breadth of the original paper. One major addition is a new section II, which outlines critical activities related to literacy that have taken place over the last decade.

The Summit process, started in late 1999, is a major field-wide effort to develop a consensus on the direction adult education and literacy must take in the 21st century. The Summit's goal is to develop a vision and action plan for the adult education and literacy field that will move us ahead in helping all adults and families become more literate.

The process is being planned and carried out by a steering committee that includes the National Center for the Study of Adult Learning and Literacy (NCSALL), the National Coalition for Literacy (NCL), the National Adult Education Professional Development Consortium (NAEPDC), the National Institute for Literacy (NIFL), and the U.S. Department of Education, Office of Vocational and Adult Education (OVAE). Initial funding was provided through a grant from the Wallace Reader's Digest Fund, with additional funding from GTE Service Corporation, Time Warner, and World Education.

The first meeting of the National Literacy Summit 2000 convened 150 leaders from adult education and literacy and other related fields for a two-day intensive working meeting on February 14-15, 2000, in Washington, D.C. to begin building a national consensus on how to move adult and family literacy forward in the 21st century. Summit

participants were asked to offer substantive comments on the original paper. The feedback received from participants convinced Summit planners that a revised paper should serve as a reference document to inform an action-oriented agenda for the field's future. As a result, a draft Action Agenda was synthesized from suggestions made at the Summit meeting, and the original paper was revised to respond to many of the major suggestions made by its readers.

The first Summit meeting will be followed by regional and other meetings to build the broadest possible consensus in further defining the vision and developing the Action Agenda. A final report will be released on or about International Literacy Day -- September 8, 2000. Online versions of the Foundation Paper, draft Action Agenda, and other information relevant to the Summit process can be found on the Internet at <http://www.nifl.gov/nifl/summit.html>.

We hope this revised Foundation Paper helps pave the way for an agenda that will better serve our field – and America's adult learners – in this new century.

I. INTRODUCTION

As the 21st century begins, strong skills are more important to the lives of American adults than ever before in our nation's history. In our increasingly knowledge-based society, which is more and more dependent on information and communications technology, all Americans must have a solid foundation of skills in order to have a chance to succeed in their principal adult roles -- as workers, parents, and citizens. Most importantly, adults must be equipped with the skills necessary to continue learning. They must be prepared for a lifetime of learning to survive and prosper in a world of rapid social and technological change.

The fundamental set of tools for lifelong learning is literacy – defined by the National Literacy Act of 1991 as "...an individual's ability to read, write, and speak English, compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one's goals, and develop one's knowledge and potential."

Adult Literacy in America, which reported the results of the 1991 National Adult Literacy Survey, described literacy as "...a currency in this society. Just as adults with little money have difficulty meeting their basic needs, those with limited literacy skills are likely to find it more challenging to pursue their goals – whether those goals involve job advancement, helping their children succeed in school, consumer decision-making, citizenship, or other aspects of daily life. Even if adults with the lowest literacy levels are not experiencing difficulties at present, they may be at risk as the nation's economy and social fabric continue to change and become more demanding."¹

Millions of American adults could benefit from literacy services. Their varying needs are compounded by issues of poverty, race, language, disability, and access. As the definition of literacy has expanded beyond the skills of reading and writing to embrace

¹ p. xix, *Adult Literacy in America*, National Center for Education Statistics, 1993.

higher order and life skills, so have the numbers and needs of potential adult learners. Over the last two decades, major efforts have been made by dedicated literacy workers, paid and volunteer, and adult learners themselves, to bring the issue of literacy to the attention of policymakers and the general public, and to improve the quality and accessibility of services. As will be pointed out, we have made real advances, but much more must happen if our country is to have the system of adult literacy it needs and deserves.

This paper serves as the foundation for a call to action. It calls for us to build on the real progress that has been made to date and to create an American adult literacy service delivery system that provides quality, accountability, adequate support, and equal access for all adults. It calls for us to assure that adult literacy becomes a publicly acknowledged, fully enfranchised part of the larger educational system in the U.S. – a critical part of the lifelong learning continuum. Finally, it points to the need for an action agenda that involves all sectors of American life in this commitment – individuals, businesses, organized labor, foundations, government, civic organizations, educational institutions, community and faith-based organizations, libraries, and advocacy groups. **We challenge all Americans to ratify this agenda and to work with us toward the goal of greatly strengthening our nation’s delivery of services to adults with literacy needs.**

The impact of such an agenda will be enormous. Higher levels of adult literacy will help improve the educational readiness and progress of young children, the job prospects of many of our poorest and minority citizens, the health and well-being of American families, the safety of our communities, and the economic vitality of our nation. If we do not invest in adult education now, we run the risk of becoming a nation with two populations – one whose members have sufficient education to compete in the global economy, help their children succeed in school, and play an active role in their communities, and another whose members’ lack of education leaves them and their families falling further and further behind.

The currency of literacy is more highly valued today than ever before. The United States can and must meet this challenge.

II. WHAT’S HAPPENED TO LITERACY SINCE JUMP START

In 1989, the groundbreaking report *Jump Start: The federal role in adult literacy* presented what literacy stakeholders said they needed in terms of a federal response to literacy. This was one of the first major reports to focus attention on adult literacy as a major national issue. Perhaps most important, *Jump Start* revealed that there was an active, vocal field of adult education and literacy across America. In the 11 years since *Jump Start* was published, some of the recommendations contained in the report have been met, unforeseen advances have been made, and new challenges have arisen. The most consistent piece of good news has been the continuing activity – especially at the state level – of an increasingly united field.

States have become better and more active advocates in behalf of adult education – by working with their legislatures to secure greater funding and support, and instituting improved instructional and professional development systems. The field has matured over the last decade, and state and local practitioners have been building systems of services that link adult education and adult learners with related agencies -- social services, public health, job training – and the business and labor communities. Students' individual learning plans have increasingly included "contextualized" learning activities – reading, math, and problem-solving grounded in work, family, and community learning contexts. This "responsive" approach to adult education has been complemented by the development of strategies to support adults with learning disabilities (LD), who make up an estimated fifty percent of adults who did not finish high school. Moreover, the strategies developed for adults with LD hold the potential for improving instruction for all learners. And in order to accommodate time and place demands of learners, states are developing distance learning and other non-classroom learning opportunities.

At the same time, a host of major national events have changed the literacy landscape:

- In 1990, the President and the governors adopted six National Educational Goals, including one that states: "By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship." Adult literacy was given an equal standing nationally with the other systems of U.S. education, and literacy itself was provided a broader, more comprehensive definition.
- In 1990, the Secretary of Labor's Commission on Necessary Skills (SCANS) surveyed a group of business and education leaders to identify the skills adults need for success in the workplace. The group named five workplace competencies and three foundation skills. Many adult learning programs have used these skills as a focus for lessons, and The Comprehensive Adult Student Assessment System (CASAS) has correlated its life skills competencies to the SCANS foundations skills and workplace competencies
- The National Literacy Act of 1991 created the National Institute for Literacy (NIFL), a federal office devoted exclusively to literacy issues. This had been one of the major concerns of the field for many years, and a primary request in the *Jump Start* report. In addition to acting as a point of contact for the literacy field, NIFL has undertaken a number of innovative projects over the years, including the Equipped for the Future standards development and system reform effort, the National Adult Literacy and Learning Disabilities Center, and **LINCS**, a comprehensive nationwide information and communication system on the Internet. **LINCS** activities include the maintenance of a number of on-line discussion groups that treat a variety of critical literacy-related issues, such as learning disabilities, English-as-a-Second-Language, health, and homelessness.

- The 1992 National Adult Literacy Survey (NALS) is the most comprehensive assessment of the literacy skills of American adults conducted to date. It tested some 26,000 adults on three scales of literacy proficiency – prose, document, and quantitative – and divided the resulting data into five levels of skills. According to the NALS, up to 23 percent of American adults score at Level 1, the lowest level of proficiency, with up to 28 percent scoring at Level 2. This indicated that roughly half of American adults may have basic skills needs. The NALS also found that lower skills were related to less work, lower wages, and greater poverty.
- The Personal Responsibility and Work Opportunity Reconciliation Act (P.L. 104-193) was signed into law in 1996. This welfare reform plan required work in exchange for time-limited assistance to welfare recipients. A new system of block grants to states for Temporary Assistance for Needy Families (TANF) was created, changing the nature and provision of welfare benefits in America. Moving people from welfare into work is now one of the primary goals of federal welfare policy. Welfare-to-Work grants to states and local communities create additional job opportunities for the hardest-to-employ recipients of TANF. This legislation, which rescinded the JOBS program as of July 1, 1997, contains provisions that have had a substantial negative impact upon adult education programs and their potential clients. Unlike the JOBS program, the Act de-emphasizes education for welfare recipients in favor of immediate involvement in the labor force.
- The goal of the Workforce Investment Act of 1998 (WIA) is to ensure that the U.S. remains competitive in the global economy by providing workers with the reading, writing, computing, problem solving, and communication skills they need to succeed in the workforce, and to provide businesses with highly skilled workers. The WIA consolidated over 50 employment, training, and literacy programs – including the National Literacy Act, Adult Education Act, and Job Training Partnership Act – into three funding streams to states: one for adult education and family literacy, one for disadvantaged youth, and one for adult employment and training. Title II of the new law – the Adult Education and Family Literacy Act – replaces the Adult Education Act and continues the federal investment in adult education and family literacy for five years. While the old Act allowed states to use federal funds for family literacy services, the new law puts family literacy on an equal footing with adult basic education and ESL services. States are required by WIA to develop comprehensive and collaborative five-year plans for adult education and family literacy services.
- The focus on family literacy has grown, as demonstrated by the fact that funding has increased over the past 10 years from \$14.5 million to \$150 million. The Even Start Literacy Program was first authorized in 1989 as Part B, Chapter 1, Title 1 of the Elementary and Secondary Education Act of 1965. The purpose of Even Start is to help break the cycle of intergenerational poverty and poor literacy by improving the educational opportunities of the nation's low-income families through integrating early childhood education, adult literacy or basic education, and parenting education into a unified family literacy program. Even Start provides funding for statewide family literacy initiatives that coordinate local, state, and federal efforts. Even Start requires states to develop "indicators of program quality" to evaluate and improve

their programs. It also requires research on successful family literacy activities that could be used to improve the quality of existing programs.

- In the mid-1990s, the National Institutes of Health's National Institute of Child Health and Human Development presented the findings of a decade's worth of extensive research on reading and disorders related to reading. The longitudinal findings of these research programs – particularly the discovery that the lack of phonemic awareness is a major cognitive deficit preventing the learning of reading – are proving to have definite significance for adults as well as children.
- The Reading Excellence Act (REA) was enacted in 1998 as a child and family literacy initiative designed to ensure that every child can read well and independently by the end of third grade. While focused primarily on children, the law includes \$10 million for statewide family literacy grants to enable states to plan and implement statewide initiatives to coordinate and integrate existing federal, state, and local literacy resources. Under REA, NIFL is responsible for disseminating information about successful research-based approaches to reading, and is also exploring the intergenerational implications of these approaches.
- The U.S. Department of Education's Office of Vocational and Adult Education has instituted a National Reporting System for adult education programs nationwide that focuses on quality outcomes for clients. The purpose of the NRS is to develop a national system of program accountability, create technology for federal reporting, and improve state and local capacity for meeting the system's requirements. States have to establish performance standards for the measures and consider program performance on the standards when funding local programs.

Given all this activity and more, we are clearly not starting from square one in terms of creating a strong literacy system. Many promising things have happened since Jump Start, and we can build on them. But now we need to broaden our agenda and our constituency. The whole field must be involved at every level, from learners and practitioners to state and national administrators to researchers and curriculum developers. As behavioral and cognitive scientist Thomas Sticht has urged, we need to move our field from the margins to the mainstream of American education.²

III. THE GROWING IMPORTANCE OF LITERACY

New information, ideas, discoveries, products, and problems confront us every day, and this will only accelerate as the new century continues. Adults need to continue learning, not just during their school years, but throughout their lifetimes. This lifelong learning will take place at work and at home, in both traditional, formal ways and new, informal ways – some of which have yet to be invented. Adults without strong basic skills will find it difficult to keep up with the new demand for continuous learning. Low literacy affects not only these adults, but also their families, communities, and the economy.

² Sticht, T., "The Adult Education and Literacy System (AELS) in the United States: Moving from the Margins to the Mainstream of Education," p. 3, February 2, 2000

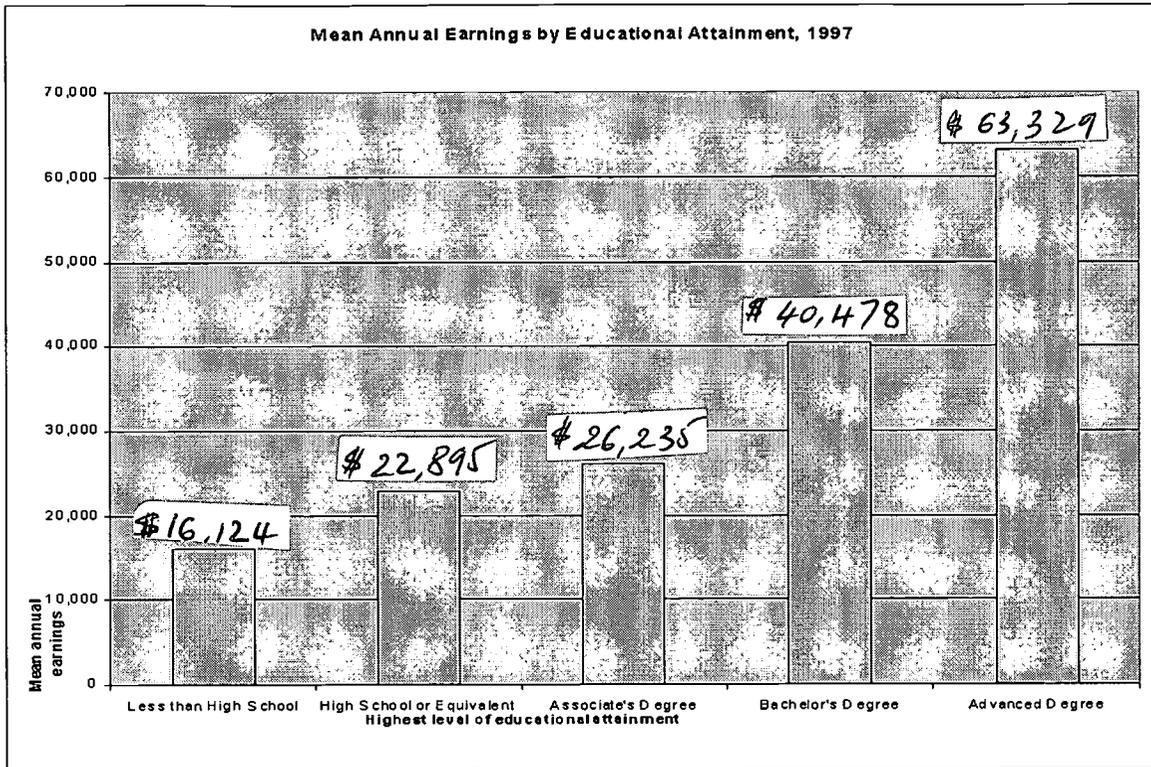
Why is Literacy Important to Individuals?

In 1993, NIFL undertook an initiative that began by asking learners themselves why they needed literacy. This initiative, Equipped For the Future (EFF), conducted a survey of 1,500 adult learners from 151 programs in 34 states. This initiative was aimed at addressing the question: What is it that adults need to know and be able to do in order to be literate, compete in the global economy, and exercise the rights and responsibilities of citizenship? More than identifying specific knowledge and skills they needed to meet these challenges, adults drew attention to four overarching purposes for learning that motivated them to continue their education. The four purposes are:

- Access: To gain access to information and resources so they can orient themselves in the world.
- Voice: To give voice to their ideas and opinions with the confidence that they will be heard and taken into account.
- Action: To solve problems and make decisions on their own, acting independently, as parents, citizens, and workers, for the good of their families, their communities, and their nation.
- Bridge to the Future: To keep on learning in order to keep up with a rapidly changing world.

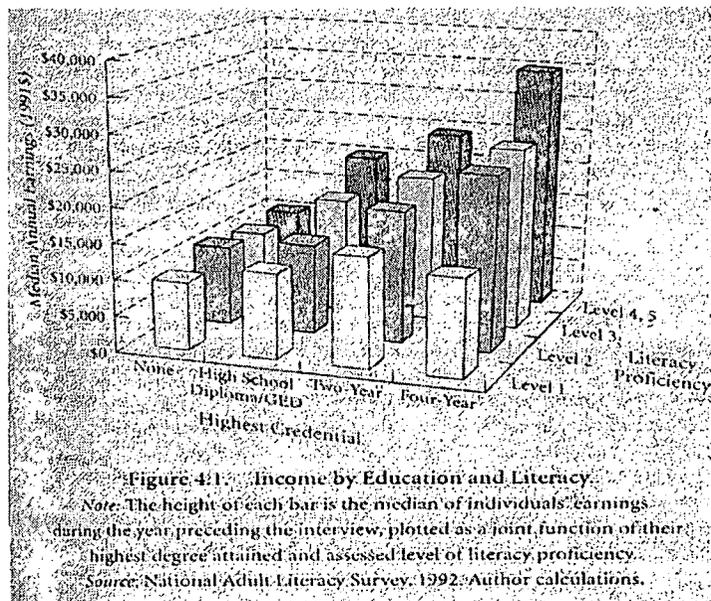
The EFF survey showed us that adult learners have their own individual reasons for continuing their education, all of which relate to the four purposes. Embedded in these purposes are the specific tasks and demands that we all confront in our daily lives, such as navigating the Internet, dealing effectively with insurance policies and other forms, securing and handling health information and benefits, managing personal finances (such as ATM's, bank accounts, and leases), and avoiding scams of various kinds – all now requiring well-developed basic skills.

Strong basic skills are essential for access to and success in further education and training, and they are also essential for workers who want to take advantage of the rapid pace of change and growing complexity of the global economy. Only a generation ago, adults with relatively low basic skills could earn a decent living and have a good life if they were willing to work hard. This is no longer the case. Since 1980, the wage difference between adults without a high school diploma, those with a high school diploma, and those with some post-secondary education has steadily grown wider. This trend helps explain why the current income differential between the top 20 percent of earners and the bottom 20 percent is at a historic high. In 1997, high school graduates earned an average of 42 percent more than those with less than a high school education, and this wage gap continues to grow.



Source: US Department of Education

But educational level alone is not the determining factor in earning power. As the following chart illustrates³, educational credentials and literacy proficiency together determine what a person is likely to earn on the job.



³ Reder, S., "Adult Literacy and Postsecondary Education Students," p. 113, *The Annual Review of Adult Learning and Literacy, Volume 1, NCSALL, 2000.*

The figure above is one of many indications that schooling is not synonymous with skill level, and that grade level is not an appropriate surrogate for skill level in adults. As adult learner Lauren Angelo said, "I graduated in 1983, but I don't really understand why I did. Although my math skills were adequate, my grammar, spelling, and writing skills were terrible. I really felt bad not being able to fill out job applications properly. Because of my...mistakes, I'm sure I lost many job opportunities."⁴

In addition to lower earnings, adults with literacy needs often lack the necessary skills to find and understand health-related information and, as a result, often fail to engage in preventive health and early detection practices. Recent research has established a strong connection between literacy level and health status, and there is clear evidence of a link between low literacy, poor health, and early death.⁵ In a project assessing the effects of poor literacy on patient-provider interactions, Drs. Parker, Williams, and Baker at Emory University School of Medicine found that more than 35 percent of English-speaking and 61 percent of Spanish-speaking patients had inadequate or marginal functional health literacy – a problem especially prevalent among the elderly. According to the study, these patients were almost twice as likely as more literate patients to report their health as poor, to misunderstand medication instructions and return appointments, to have difficulty navigating to and within the hospital and understanding informed consent, and to feel shame about their inability to read. In addition, it was found that inadequate health literacy had a negative impact on patient management of both diabetes and hypertension – a demonstration of the relationship between low literacy and chronic illness.⁶

Why is Literacy Important to Families?

The changes in society have also affected our roles as parents and family members. Parents are the first and most important teachers of their children, and their role is becoming increasingly more demanding. Standards-based education reform is raising the bar for children, and higher standards may force more children out of the traditional school system before they have acquired needed skills. Children profit from the support of educated, concerned parents in meeting the learning challenges that face them. Parents need adequate literacy skills to help children prepare to enter school and to support children's continued learning.

In homes where parents have low literacy skills and do not model literacy as an important value, children's learning can suffer. In fact, problems associated with low literacy are often intergenerational. Parents with low literacy skills are often unable to help prepare young children for school or participate fully in the academic activities of their school-age children (Sticht, 1998). Educational attainment of a primary caregiver is one of the strongest predictors of a child's school achievement. Between 1992 and 1996, high school students whose parents did not complete high school were more than

⁴ Lauren Angelo, Omaha, Nebraska, p. 52, *Equipped for the Future: A Customer-Driven Vision for Adult Literacy and Lifelong Learning*, NIFL, July 1995.

⁵ Hohn, M., "Empowerment Health Education in Adult Literacy," National Institute for Literacy, 1997.

⁶ Parker, Dr. R., Williams, Dr. M., Baker, Dr. D., "Effects of Illiteracy on Patient-Provider Interactions," Emory University School of Medicine, October 1996.

twice as likely to drop out of school as students whose parents had at least some college education (National Center for Educational Statistics, 1998).

As adult learner Bobbie Keefer said, “[t]ake my oldest son, in and out of jail with a twelfth grade education. I tried to let him know that he needed more education, but he rejected me. ‘Why,’ I asked him. He then replied, “You didn’t finish high school yourself.””⁷

In describing the essential role parents play in children’s literacy, Thomas Sticht (1998) writes:

“Due to the intergenerational transfer of cognitive skills, including language and literacy, an investment in the literacy education of adults provides ‘double duty dollars.’ It improves the educational level of adults and simultaneously improves the educability and school success of the adults’ children.”

Family literacy efforts bolster these “double duty dollars” by providing literacy services to adults in the context of the family. As parents build their own skills, they build the skills and knowledge necessary to help with their children’s education.

Another adult learner, Deborah Sue Weinberger, put it this way: “[w]hen one’s ... skills are poor or none, everyday life some take for granted can be complicated. For me, filling out forms at doctors’ offices, registering my children at school, ... writing out checks, going to social events that might require some form of reading and writing, and going to the polls to vote. I must say that even though these sound bad enough they are not as heartbreaking as the thought of not being able to contribute as much as I would have liked to my children’s own learning.”⁸

Why is Literacy Important to the Economy?

Today’s global marketplace is characterized by both intense competition and increasing interdependence among nations. *Literacy, Economy and Society: Results of the First International Adult Literacy Survey (IALS)* highlights a strong link between economic growth and labor force skills. Findings suggest that industrial sectors experiencing growth tend to have a highly literate workforce. The money that countries, communities, employers, and workers spend on improving literacy skills should not be seen simply as an expense but as a wise investment that will yield a long-term pay-off.

The IALS found that those countries with the strongest literacy skills include a high proportion of the people who have completed post-secondary education. Those at the low end of the literacy scale include older people with little formal education, school

⁷ Bobbie Keefer, Memphis, Tennessee, p. 87, *Equipped for the Future: A Customer-Driven Vision for Adult Literacy and Lifelong Learning*, NIFL, July 1995.

⁸ Deborah Sue Weinberger, Martinville, Illinois, p. 35, *Equipped for the Future: A Customer-Driven Vision for Adult Literacy and Lifelong Learning*, NIFL, July 1995.

dropouts, and immigrants. The survey found that three out of four Americans with less than a high school education performed at the lowest levels of literacy. According to Secretary of Education Richard Riley:

“Too many Americans scored at the bottom end of the scale on this survey. That is very troubling for our economy and our future. Other nations in the study had a similar problem. Low levels of literacy plague most industrialized nations, not just the United States. But that is no excuse for our performance, and we must redouble our efforts here in America to make sure that all our citizens are literate and skilled.”

The U.S. labor market has experienced robust job growth in recent years. In 1999, the unemployment rate reached its lowest point in nearly three decades. Some suggest that we are entering a new economic era in which many of the old rules don't apply, but one persistent fact is that individuals with strong skills are better equipped to succeed in the workplace. Over the years, the unemployment rate for high school dropouts has been consistently higher than for those with a better education. For instance, in 1992 the unemployment rate was 11.5 percent for high school dropouts, but only 6.8 percent for high school graduates and 3.2 percent for college graduates. In 1998, the unemployment rate was 7.1 percent for high school dropouts, but only 4.0 percent for high school graduates and 1.8 percent for college graduates.⁹

Job growth is concentrated in industries paying above-average wages, requiring new skills and a more educated workforce, and disproportionately employing “knowledge workers.” Two areas of particular growth are managerial and professional specialty jobs. According to the National Alliance of Business, “...the types of jobs that will grow the fastest in the future will be those requiring more and more education and training.” From 1983 to 1996, employment in occupations requiring an associate's degree or post-secondary vocational training grew at a 3.1 percent annual rate, as compared to a 2 percent growth rate for all employment. Projections through 2006 anticipate a similar pattern.¹⁰

According to Richard Lester in *The Productive Edge*, “The evidence...points toward the need for a new national agenda for economic growth...focused on the problem of investing in knowledge and skills.” The National Alliance of Business (1999) agrees: “An educated workforce is not simply a luxury or a pipe dream; it is a necessity in this new, high-tech global market system.”

Why is Literacy Important to Communities?

Literacy is also linked to important civic behaviors such as voting. According to the 1992 National Adult Literacy Survey, only 55 percent of Americans at the lowest levels of literacy voted in a recent state or federal election, as compared to 89 percent of those

⁹Lerman, R., Schmidt, S., “An Overview of Economic, Social, and Demographic Trends Affecting the US Labor Market,” Final Report, The Urban Institute, August 1999.

¹⁰“U.S. Productivity: The Challenges Ahead,” Workforce Economics 5(2), National Alliance of Business, 1999.

at the highest level of literacy.

There is also some evidence that participation in literacy programs can result in an increase in learners' civic involvement.¹¹ And EFF sites report a wealth of anecdotal data about the community involvement of learners in EFF classrooms – involvement ranging from neighborhood clean-up activities to meetings with local and state officials. Additionally, programs that provide recent immigrants with the language skills necessary to participate in their communities often provide instruction in the culture, history, and political systems of this country, which can be an incentive for further involvement. Adult learner Deborah Johnson said, "I realize that my vote is my voice in my community. As a citizen, it is my responsibility to exercise that right. I understand that I can make a difference in my community by getting involved in what is happening. I can participate in the neighborhood block watch. I can volunteer in the school system, serve lunches or help in the classrooms...I've experienced a lot through the years and I should let my voice be heard."¹²

Literacy also has implications for the safety of our communities. There is a correlation between low literacy and involvement in the correctional system. The NALS-based study *Literacy Behind Prison Walls* (1994) found that two-thirds of the U.S.'s nearly one million prisoners are less literate than the general adult population. Prison inmates are over-represented in the lowest literacy levels and only slightly represented in the highest literacy levels – two-thirds ranked in the bottom two NALS levels. The prison population tends to be younger and less educated than the general adult population and includes a disproportionate number of poor people. Those released from prison are often unable to find gainful employment, partly due to a lack of literacy skills, and are often reincarcerated (Paul, 1991). Studies indicate that inmates who actively participate in education programs have a significantly lower likelihood of recidivism (Harer, 1995).

IV. WHERE DOES THE UNITED STATES STAND NOW IN TERMS OF LITERACY?

What is the scope and nature of low literacy in the U.S.?

As mentioned earlier, the 1992 National Adult Literacy Survey (NALS) found that 44 million American adults function at the lowest of five literacy levels. This represents about 22 percent of the total adult population. Although many adults at Level 1 could perform tasks involving simple texts and documents, all adults scoring at Level 1 had difficulty using certain reading, writing, and computational skills considered necessary for functioning in everyday life. The following chart details activities most adults at Level 1 usually could and could not perform successfully:

¹¹ Bingham, M.B., Ebert, O., and Smith, M., "Changes in Learners' Lives One Year After Enrollment in Literacy Programs," NCSALL Reports #11, December 1999.

¹² Deborah Johnson, p. 42, *Equipped for the Future Content Standards*, January 2000.

SKILLS OF ADULTS IN LEVEL 1

Could Usually Perform

- Sign one's name
- Identify a country in a short article
- Locate one piece of information in a sports article
- Locate the expiration date information on a driver's license
- Total a bank deposit

Could not Usually Perform

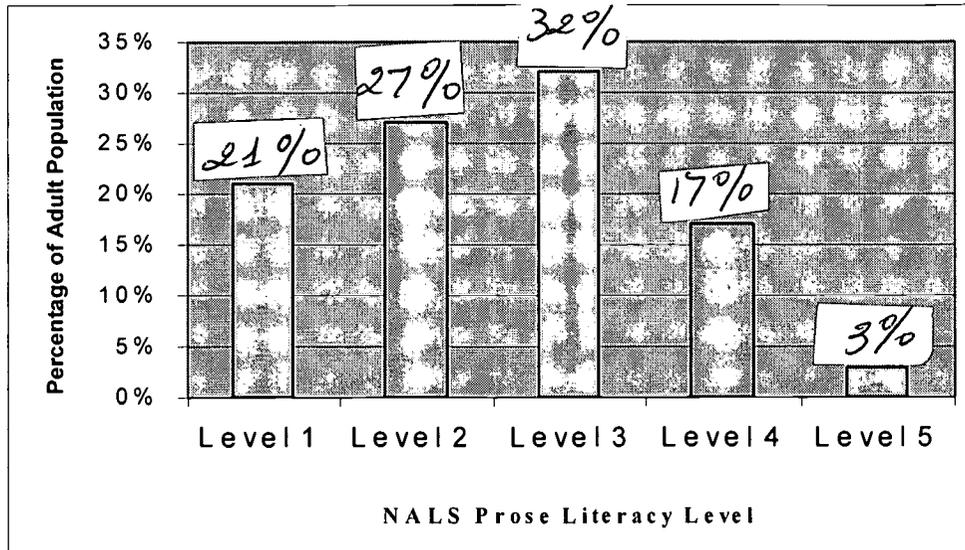
- Locate eligibility from a table of employee benefits
- Locate an intersection on a street map
- Locate two pieces of information in a sports article
- Identify and enter background information on a social security care application
- Calculate total costs of purchase from an order form

Many factors help to explain why so many adults demonstrated literacy skills in the lowest level. While there is no single "cause" of low literacy in America, there are several complex factors that contribute. Evidence suggests that learning and other disabilities, limited ability to speak English, poverty, inadequate educational opportunities, and having had parents with low skills all contribute to low literacy.

Nearly two-thirds (62 percent) of those in Level 1 had terminated their education before completing high school. In 1998, young people dropped out of high school at the rate of about 11 percent, according to the National Center for Education Statistics; the rate is significantly higher for Hispanics (25 percent), African Americans (13 percent), and people with disabilities (38 percent). This rate includes those 16 to 24 year olds who are not enrolled in school and have not completed high school.

The NALS also discovered that another group of American adults, between 45 and 50 million, fell into Level 2. These individuals were able to perform slightly more complex operations than those at Level 1, such as comparing, contrasting, or integrating pieces of information. But few among these millions of adults could demonstrate the skills essential for the 21st century, such as higher level reading ability and problem-solving. These are adults who could also greatly benefit from additional basic skills education.

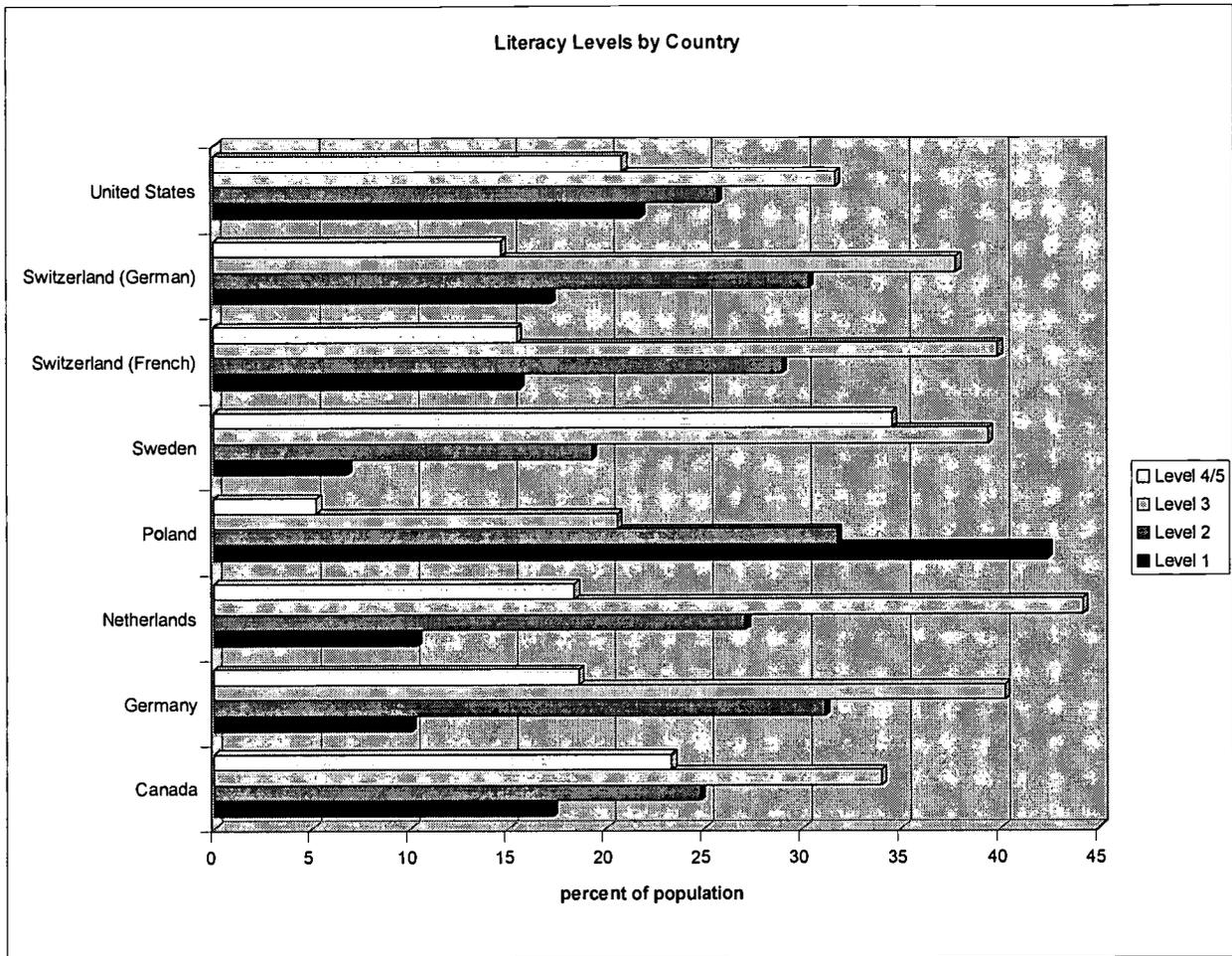
The NALS further identified people with disabilities as having especially low levels of literacy, finding that 68-90 percent of people with disabilities scored at Levels 1 and 2, depending on the particular disability. Sixty percent of adults who identified themselves as having a learning disability (LD) scored at Level 1, and 20 percent scored at Level 2.



In contrast to adults scoring in Levels 1 and 2, adults who scored in Level 3 were able to perform tasks such as integrating information from relatively long or dense text documents. They were also able to determine the appropriate arithmetic operation needed to solve a problem based on information contained in the instructions and identify the quantities needed to perform the operation. Only adults who scored in the top three levels of NALS – just slightly more than half the U.S. population – were counted as having a strong foundation in basic skills.

How Does the U.S. Rank Internationally?

In 1997, the International Adult Literacy Survey (IALS) surveyed the literacy skills of adult populations in Australia, Belgium, Canada, Germany, Ireland, the Netherlands, New Zealand, Poland, Sweden, Switzerland, the U.S., and the United Kingdom. This survey showed that several countries have a larger percentage of adults at and above Level 3 than the United States. In other words, the United States had a higher percentage of adults with significant literacy needs.



Source: Organisation for Economic Cooperation and Development, Human Resources Development Canada (1997)

Who is being served, and what services are they getting?

There are many reasons why adults have low basic skills or lack a high school diploma. Some are recent immigrants who did not speak English before they arrived. Though some were well educated in their own countries, others lack strong literacy skills in their native languages. Still other adults attended schools in the U. S. that were unable to provide them with real opportunities to learn. According to Sticht, "the Organization for Economic Cooperation and Development reported in 1992 that, in many industrialized nations, including the U.S., the formal educational system for children was not as effective as it should be in producing adults with the literacy skills needed to meet the demands of contemporary society, particularly the new world of work."¹³

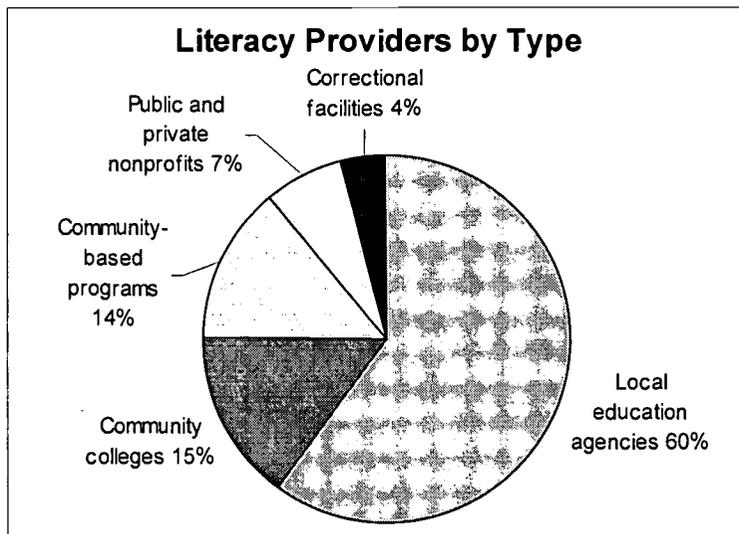
Poverty is recognized to have a strong connection to low literacy – a complex link that needs much greater examination. Forty-one to 44 percent of people in the lowest

¹³ Sticht, T., "The Adult Education and Literacy System (AELS) in the United States: Moving from the Margins to the Mainstream of Education," p. 3, February 2, 2000.

NALS literacy level were living in poverty, compared with only 4 to 6 percent of those in the highest level. Our nation's history of racial discrimination has undoubtedly contributed to the fact that African-American, Hispanic American, and Native American adults are disproportionately represented in this population. Another, probably substantial, group of adults grew up without having their learning disabilities identified or addressed. Some grew up in home situations that were too difficult to allow time and attention for school, while others found school uninteresting.

Only eight percent of adults with low skills are enrolled at any given time in federal and state supported adult education and literacy programs.¹⁴ Nationally, this totals about 4 million adults annually.

Adult learners are served by a variety of providers, with the majority of participants enrolled in programs provided by local educational agencies. Many are also served by programs at libraries, community colleges, community-based organizations, nonprofit organizations, and correctional facilities.



Adult education and literacy providers generally offer four primary types of services. Adult Basic Education (ABE) provides instruction to adults with low literacy skills. Adult Secondary Education (ASE) provides instruction that leads to a high school certificate such as a GED. English for Speakers of Other Languages (ESOL) provides instruction in speaking, reading, and writing English. ABE, ASE, and ESOL programs also take place in specific contexts. The two major settings are family literacy and workplace literacy.

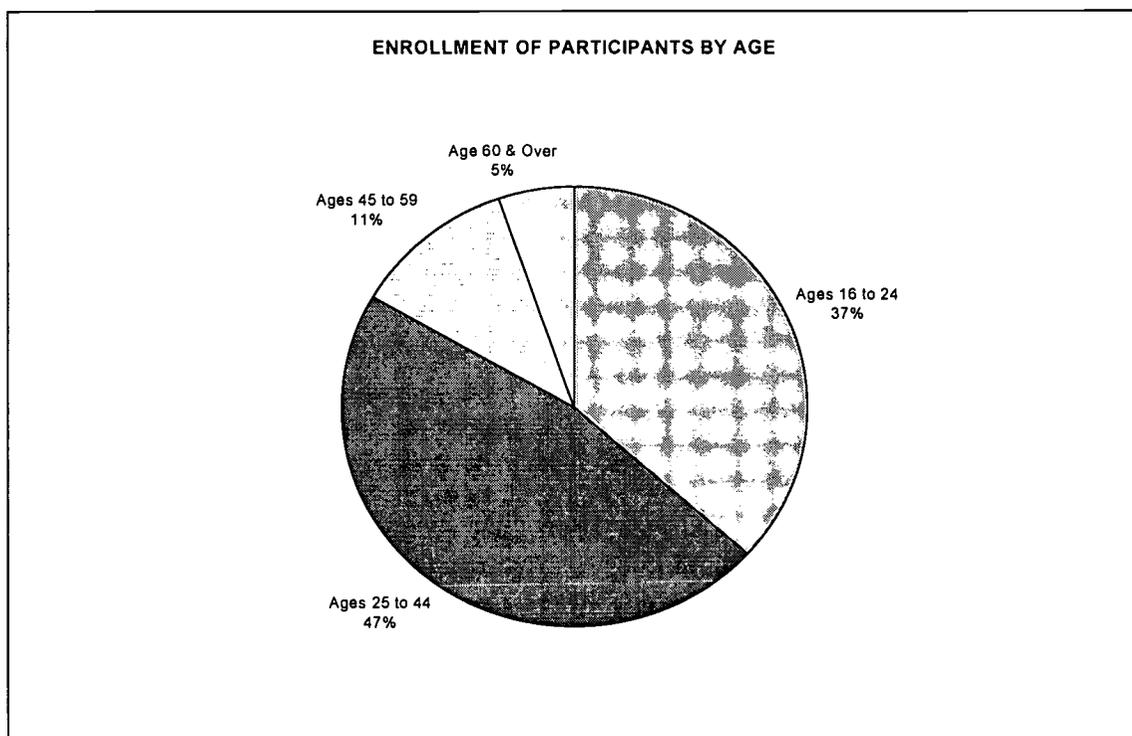
Family literacy provides integrated educational services for families, including adult education for parents in conjunction with early childhood education for their children. Services also focus on developing parents' knowledge and skills as their children's first

¹⁴ Percentages are based on programs that receive some federal funds. They include most – but not all – adult education and literacy programs nationwide. Data are not available for programs that do not receive any federal funds.

teachers and encouraging active involvement in their children's schooling. Workplace literacy provides basic skills instruction for incumbent workers either at work sites or in community settings. Developed in partnership with employers, these programs often provide customized instruction focused on job performance. Of the almost 4 million adults enrolled in 1998, 1.5 million were in ABE services, 1 million were in ASE services, and 1.8 million were in ESOL services.

Enrollment in adult education programs has grown consistently over the past three decades. In the mid-70's, enrollment approached 2 million adults. By the mid-1990's, the number had grown to the current level of 4 million. Between 1986 and 1996, enrollment increased by 31 percent, and this trend is expected to continue. As the skill level needed for economic, social, and family success continues to increase, the demand for adult education and literacy programs is likely to increase as well.

Adult literacy providers serve a diverse group of learners with a variety of needs. Among the participants are the working poor, immigrants, high school dropouts, people with disabilities, and welfare recipients. The majority of participants are either young adults or adults in their prime employment years. In 1996, 37 percent of individuals enrolled in adult education and literacy programs were ages 16 to 24. Another 47 percent were ages 25-44. Eleven percent were ages 45-59, and five percent were age 60 and older. In addition to being relatively young, the majority of participants in 1996 were either Hispanic or white. During the same period, 38 percent of adult learners were Hispanic, 32 percent were white, 17 percent were black, 12 percent were Asian/Pacific Islander, and one percent were American Indian.



Participants also show a great deal of diversity in their achievements. During the period between 1993 and 1998, participants realized a variety of benefits and outcomes from

their participation in adult education programs. The literacy services received allowed participants to achieve goals such as:

- entering more advanced training programs (28 percent)
- finding jobs (25 percent)
- gaining needed skills to either keep a job or advance to a better job (23 percent)
- achieving citizenship (9 percent)
- registering to vote (9 percent)
- leaving public assistance (6 percent)

The demand for ESOL services considerably exceeds the supply, resulting in long waiting lists, particularly in urban areas. Like ABE and ASE participants, ESOL learners are by no means a homogeneous group, in background or motivation. Their various reasons for attending ESOL classes include: getting or keeping a job, earning a GED, assisting their children with homework, gaining entry into post-secondary education, and becoming licensed in the professions they practiced before immigrating to the United States. Simply being able to communicate with English speakers is a critical incentive.

As adult learner Maria Martinez explained, "I started taking English classes ... to learn the basics. ...I had the need to understand the language and to be understood. I didn't need an interpreter any more. I was able to say, 'please speak slowly, or repeat what you said, please. I'm learning English.' ...[Now it's]...a constant learning. I'm able to participate in all kinds of activities; in the community, in my kids' school, and in church.... Now I can help my kids with their homework, I can read bedtime stories to them, and answer their questions. I've also got a job. ...I had to be able to communicate with my employers and supervisor. If I didn't know English, I wouldn't qualify for the job."¹⁵

Even though enrollments have increased, many adults in need of services are not seeking them. These adults are considered the hardest to serve, and targeted efforts to recruit and retain them are necessary. They are the adults with the lowest levels of literacy, those in communities with the least developed services, and the working poor who cannot find time in their schedules for programs not designed to meet their specific needs. According to the National Center for Educational Statistics (1998), many adults don't seek services due to lack of time and lack of access to transportation and childcare services. Just as important is the fact that many adults do not seek or stay enrolled in programs because they are working and do not have access to services at times or in formats that are convenient to their schedules and circumstances.

How much do we currently invest in adult education services?

Each year, many adults successfully improve their skills in programs funded by federal and state governments and the private sector. But the number of adults with literacy needs far outweighs our current national capacity to help them. With all the progress

¹⁵ Maria Martinez, Weirton, West Virginia, p. 42, *Equipped for the Future: A Customer-Driven Vision for Adult Literacy and Lifelong Learning*, NIFL, July 1995.

that has been made, the United States still lacks a sufficiently funded, comprehensive, articulated national system with the capacity to provide quality learning opportunities to all adults with low skills. There is a wide disparity of services among adult education programs, and varying capabilities to meet the needs of a diverse population of adult learners. Funding mechanisms are fragmented, and there is little consensus on the most effective teaching practices. Given these severe handicaps, the field does a great deal with what it has.

While the total public and private investment in literacy has risen substantially over the past 30 years, amounts are meager in relation to the need. Adult literacy has historically been a very low priority for most policymakers at every level of government. Sticht (2000) points out that a graphic in the Digest of Education Statistics for 1998 showing the structure of American education includes adult education as a marginal footnote – an apt metaphor for the actual marginalization of adult education in our educational system. Still, federal and state funding dedicated to adult and family literacy services provide the major source of support for the basic skills education infrastructure in this country. There are several other sources of funds that either purchase services from this system or support their own program structures.

- **Direct Federal and State Investment in Adult Education and Literacy.** In 1970, the federal funding for adult education was approximately \$40 million, with 535,613 adults enrolled throughout the country. By 1980, federal funds for adult education state grants increased to over \$99 million, and enrollments rose to over 2 million. In 1990, federal funds increased to over \$192 million, with enrollments rising to more than 3.5 million. During the 1999 appropriations debate, Congress increased federal funding for adult education state grants to \$450 million. This translates into a ten-fold increase in federal funding for adult education over the last 30 years. (Sticht, 1999)

Federal funding, however, provides only a quarter of the overall funding for adult education. Most local programs rely on funds from states, private foundations, and individual donations for literacy services.

- **Local government and community investment.** Many adults are served by programs funded by local government and private sources. About one in four public libraries sponsors literacy programs for adults who wish to improve their reading skills. Most public libraries provide information and referral services regarding adult literacy programs in their communities, and a growing number of libraries also sponsor family literacy programs (American Library Association Presidential Committee on Literacy, 1989).

The lack of public support – financial and otherwise – for community based organizations is a continuing source of concern among many in the field. As National Adult Urban Literacy Coalition President Edith Gower has pointed out, “there are many ... community-based programs standing alone as literacy service providers or offering such services as part of larger organizations. A family literacy program in a neighborhood clinic, a GED program in a Chinese community center,

and a model program with full-time staff operating in a mall that receive no state or federal funding are not visible parts of the system. Only 12 programs out of the 130 that the Houston READ Commission represents have such funding. Not every program even wants public funding, but if we wish to move forward, we first have to see where we are. If we want outsiders to recognize us as a system, we need to acknowledge all the players and understand the roles they play.”

Business Investment. Investing in literacy for all Americans yields significant advantages for employers – especially given the drive to create high-performance workplaces. Helping workers gain advanced or upgraded skills is among several key investments for competitive business performance, which, in turn, is essential to raising the standard of living for all Americans. But while U.S. employers, on average, spend about \$30 to \$40 billion annually on training (amounting to about 1 percent of payroll costs)¹⁶, basic skills training makes up only one percent of total hours of employer-provided training.¹⁷ In the American Society for Training & Development’s State of the Industry report for 2000, the firms surveyed invested by far the least money in basic skills training – of 13 types of courses, basic skills was 13th in amount of training expenditures.

- **Organized Labor Investment.** Organized labor makes a substantial investment in basic skills training and literacy services for its members – at least tens of millions of dollars annually. Labor unions have a long history of making workforce education and training a priority. Such initiatives focus on career development and the special needs and considerations of workers, and provide some of the basic skills training that employers do not provide.
- **Post-secondary Education Investment.** Institutions of higher education also invest in adult basic education by offering remedial courses for incoming students with low basic skills. In 1996, close to 80 percent of higher education institutions enrolling freshmen offered remedial courses designed to prepare students to do college-level work. Many community colleges are working with local employers and labor unions to develop courses intended to enhance the skills of existing employees or to train potential employees for high demand jobs, such as those in the technology sector. But some post-secondary institutions are beginning to back away from providing remedial and other courses for students with low literacy levels.

V. A GOAL AND A CALL TO ACTION

The National Literacy Goal set by the President and governors in 1989 was that the U.S. achieve universal literacy by the year 2000. While that goal proved to be too optimistic, in both time and scope, we still have a strong need for a goal that will focus and galvanize our efforts in behalf of literacy. Educators, businesses, organized labor, government, and advocates continue to look for innovative ways to highlight and meet

¹⁶ Committee for Economic Development, “American Workers and Economic Change,” 1996, p. 36.

¹⁷ U.S. Department of Labor, Bureau of Labor Statistics, “Survey of Employer-Provided Training-Employer Results, USDOL 96-268, July 10, 1996.

the literacy needs of our nation. The U.S. must set a realistic goal for literacy – one that is ambitious but, with concerted hard work, attainable. We suggest the following goal:

By the year 2010, the United States will be among the most literate nations in the world.

Our benchmark will be to have 70 percent of our population scoring at NALS Level 3 and above. This would be a significant increase over 1992, when only 53.5 percent of the American population scored at Level 3 or better.

A goal for adult literacy has critical significance for the nation's entire educational status. While the other six educational goals developed in 1989 focus on children, they all relate to the literacy of adults. Adults with high levels of literacy will be better able to prepare their children for school, which in turn will lead to children's greater success. Because more children will be ready for academic learning when they enter school, more will be likely to experience successful learning across the grades and graduate from high school, which will reduce our high school dropout rate. As adults, they will be better able to support their own children's learning and provide greater parental support for their children's social, emotional, and academic growth.

Achieving this new goal will require a major commitment on the part of our country's leaders and citizens. There must be a renewed effort to expend the time, energy, and financial resources necessary to achieve the goal. As part of this effort, we must recognize the barriers that have constrained earlier efforts to create a more literate society. Recognizing these challenges – several of which are listed below – will move us toward developing strategies for overcoming them and achieving our goal.

CHALLENGE 1: As a result of higher standards in K-12 education and the phasing out of remedial courses at institutions of higher education, the number of youth seeking – and being pointed toward – adult education services will increase. This is likely to put more pressure on an already strained system.

Due to rising concerns that our nation's youth are graduating from high school with poor skills in writing, reading, and mathematics, there is a renewed effort by policymakers at all levels to reform our K-12 educational institutions. Part of that effort has been the establishment of higher standards for all youth as they progress through school. In addition to these higher standards, educators and school officials are under pressure to end the practice of "social promotion," or promoting students to the next grade before they acquire the appropriate skills for their current grade level.

The combined impact of setting higher standards and ending social promotion in our K-12 institutions is likely to lead to an increase in dropouts, at least in the short term. According to the National Center for Education Statistics, the high school dropout rate¹⁸ has remained relatively steady for the past 10 years, hovering at approximately 11

¹⁸ This "status" dropout rate includes all 16 to 24 year olds who are not currently enrolled in secondary education and who do not have a high school diploma or equivalent.

percent annually. The high school dropout rate is higher, however, for Hispanics (25 percent), African Americans (13 percent), and people with disabilities (38 percent), which contributes to the disadvantages faced by minority populations in our country.

At the same time, the role of remediation in higher education has been the subject of debate among policymakers and educators. Some view remedial courses as a way to expand educational opportunities for unprepared students, while others feel that these courses should be discouraged because pre-college level courses have no place in the college curriculum. In fact, there is a growing trend in many state colleges and universities across the country to remove all remedial or “developmental” courses from their missions and offerings. For example, City University of New York (CUNY) has begun a process of eliminating such courses from most of their major campuses. This trend has the potential to close off one of the principal avenues by which adults have improved their skills to the level where they can enter and profit from post-secondary education.

The trend toward higher K-12 standards and fewer remedial opportunities in higher education institutions creates a “double squeeze” – with the potential of higher numbers of young adults in need of education being left with fewer options to enhance their knowledge and skills. We need to create an articulated system that values and supports the opportunity for all to acquire the skills they need, regardless of how or when they learn.

CHALLENGE 2: THE CHANGING DEMOGRAPHIC MAKEUP OF THE UNITED STATES IS INCREASING THE NUMBER OF PEOPLE WHO NEED ADULT EDUCATION AND LITERACY SERVICES. ACCESS TO SERVICES IS A CRITICAL ISSUE, IN TERMS OF BOTH THE GROWING NEED AND THE VARYING CONCERNS OF DIFFERENT POPULATIONS.

The demographic makeup of the United States is changing at a fast pace. Immigration and the aging population have emerged as the factors most likely to have the largest impact on the need for adult education and literacy services. The National Assessment of Adult Literacy (NAAL), following up on the NALS, will be conducted in 2002. According to researchers Stephen Reder and Barry Edmonston, the NAAL is likely to show that, despite a modest increase in average literacy proficiency, there will continue to be large numbers of adults at low levels of literacy proficiency.¹⁹

- **Immigration.** Immigration accounts for approximately 600,000 new arrivals in the U.S. each year – and immigrants wanting to learn English constitute the fastest growing segment of the adult literacy population. While some immigrants have attained high levels of education – including advanced professional degrees – in their own countries, many more are not literate in their native languages. Whatever the level of education, an inability to read, write, or speak English presents a barrier to full participation in modern American life. Those with low literacy skills in their

¹⁹

Reder, S. and Edmonston, B. (in press), “Demographic change and literacy development in a decade,” Washington, D.C., National Center for Education Statistics.

own language, however, face a much more significant barrier than those at higher levels of native language literacy.

Due in large part to the influx of immigrants into the country, there are an estimated 14 million adults living in the U.S. who have not achieved English language fluency. Enrollment for ESOL classes jumped from 1.2 million in 1994 to nearly 2 million in 1998. The increased demand for ESOL classes has resulted in long waiting lists in many parts of the country. For example, Los Angeles has a waiting list of 50,000 adults for ESOL classes. Most ESOL programs in Chicago are filled to capacity as soon as they open their doors. New York State has resorted to a lottery system to select from individuals who wish to learn English.

Participants attend ESOL classes for a variety of reasons, including: to obtain or keep a job, earn a GED, assist their children with homework, gain entry into post-secondary education, and become licensed in the professions they practiced before immigrating to the United States. Limited English-speaking people, as well as others with reading difficulties, can experience particular problems getting needed services, such as health care.

In building a system that allows immigrants to develop the verbal fluency and reading and writing skills that will make a difference in their lives, we need to consider the diversity in the population, so that program models can be matched to need (e.g., younger, working learners who could benefit from accelerated programs, those not literate in their own language).

- **An older population.** Immigration is not the only demographic factor that is changing – our nation is also growing older. The oldest among America's so-called baby boomers – the huge cohort born between 1945 and 1965 – will reach age 65 in 2010. By 2020, almost 20 percent of the U.S. population will be 65 or older. There will be as many Americans of retirement age as there are 20 to 35-year-olds. Reder and Edmonston (2000) estimate that, between 1995 and 2010, the population 65 years and older will slowly grow by about 6 million, and after 2010, with the baby boomers aging, the number of elderly will dramatically increase.

Adult basic and literacy education programs provide older Americans with an opportunity to improve their basic literacy or English skills. This is especially important for older immigrants who can feel isolated even in their own communities due to lack of English language skills. We need to help older immigrants and other older adults access literacy services, but unfortunately, the participation rate in adult education and training declines steadily with increasing age.

Many older adults who are employed may find their employment status in jeopardy as their jobs change due to technology and a rapidly changing economy. Employers are requiring existing employees to acquire new and more advanced skills. These same employers, however, are reluctant to invest in upgrading the skills of older workers. This can have a major impact on retirement income and self-sufficiency in old age.

Another effect of an aging population will be an increase in the demand for health care and other social services. Older adults need to be able to identify health problems and understand treatment options and requirements. Often this includes the ability to read and understand instructions for taking prescription medication. Housing, utilities, and insurance can also present challenges to older adults who lack basic skills. With the increasing number of older adults living in a rapidly changing world, lifelong learning will take on new importance in social policy.

A strong adult education and literacy system will have to deal more and more directly with the complex issues of providing access to services for these growing populations, as well as for other groups of learners with varying needs.

CHALLENGE 3: ADULTS NEED MORE OPPORTUNITIES TO GAIN THE SKILLS AND KNOWLEDGE NEEDED TO MEET CHANGING JOB DEMANDS AND TO SUCCEED IN THE WORKFORCE.

The U.S. Department of Labor estimates that by 2007 there will be about 145 million jobs and only a 148 million-person workforce. Many employers consider the primary cause of the expected labor shortage will be skills mismatch, whereby job seekers do not have the skills necessary to match the prospective employers' requirements. Many of the skills employers seek are so-called "soft skills," such as problem-solving and working in teams – skills rarely taught in high school.

In such a tight job market, with unemployment at a record low, many employers are attempting to identify the types of skills that will be needed for the workforce of the future so that prospective employees can know the specific skills required for different positions. By providing a clearer idea of what is required, employers hope to create a larger pool of qualified labor from which to draw. In northeast Ohio, for example, a group of employers surveyed 1,200 regional employers' skill needs, as well as area job training and education programs, to encourage more effective workforce development. Six states also are offering skill certification programs to demonstrate that prospective workers have particular skills. One of these states is West Virginia, which has developed a set of skill certificates to recognize attainment of skills and competencies that help learners be more employable or promotable. Another 20 states are showing an interest in this method.

Today's job requirements are changing all the time. The skills needed for information-age jobs are becoming more complex as new technology, processes, and organizational structures are introduced. This requires employees at all levels to continually upgrade their skills. It is especially important that incumbent workers' basic skills be strong enough to permit them to take advantage of additional training. Adult literacy programs need to expand their curricula to include critical work-based skills and develop a comprehensive strategy for teaching these skills to the workforce. One way to achieve this is through collaboration between adult education programs and employer/union organizations. Recent research conducted by the Conference Board (1999) found that improving employee skills creates employees who work smarter and

better and cope well with change in the workplace, improves union/management relations, and increases output and profitability.

Regardless of the job, more literate workers are likely to do better work. Sticht quotes a California Workforce Literacy Task Force report as saying that “studies in the U.S. indicated that more highly literate personnel who used their literacy skills while performing job tasks such as automobile repair or supply clerks’ jobs, showed productivity increases of as much as 10 to 15 percent.”²⁰

Historically, the goal of adult education programs was to help learners earn a GED, which has been seen as the passport to increased job opportunities. Today this is not always the case. In a study conducted by John Tyler (1998) of the Harvard Graduate School of Education, it was found that “...employers value and use the GED as a signal of skills and attitudes they consider to be important in jobs...,”²¹ and that the young white dropouts studied received a large boost in annual earnings after completing their GEDs. But for others – especially minorities – Tyler found that acquiring a GED had little impact on income. Even for those whose incomes improved, the earning gain was relatively small (only \$1,500 per year). More and more programs now view the GED as the learner’s first step toward the further credentials needed for economic and personal success. GED graduates who go on to some post-secondary or vocational skills training do realize a boost in income and job opportunities.

To ensure that more learners can make the transition from adult education to college or further skills training, literacy programs must develop or link with “transitional education” programs that help adults navigate the maze of application procedures, financial aid research, and psychological demands of continuing education. This kind of guidance can be essential to a learner’s success. Transitional programs require collaboration with support service agencies, post-secondary education and training programs, and occupational training organizations. Several states administer adult education and literacy programs through the community college system, but it is unclear whether this results in more students going on to higher education. Virtually all community colleges offer developmental programs to bolster enrolled students’ basic skills, but few actively recruit students from local literacy programs.

In order for people to succeed, they must realize that the end of one particular training program does not mean the end of learning. We need an articulated system that builds in further education and workforce development as an integral part of preparing adults for seeking and getting jobs. This system must coordinate with K-12, post-secondary education, workforce training, and businesses to insure seamless service delivery.

²⁰Sticht, T., “The Adult Education and Literacy System (AELS) in the United States: Moving from the Margins to the Mainstream of Education,” p. 4, February 2, 2000.

²¹Tyler, J., “The GED: Whom Does It Help?,” *Focus on Basics*, Volume 2, Issue B, June 1998.

CHALLENGE 4: LEARNING DISABILITIES (LD) ARE INCREASINGLY RECOGNIZED AS A MAJOR FACTOR IN THE LOW LITERACY OF ADULTS, BUT TOO LITTLE IS KNOWN – EVEN AMONG PRACTITIONERS – ABOUT THE NATURE AND SCOPE OF THE PROBLEM, THE WAYS IT AFFECTS ADULT LEARNING, AND HOW IT SHOULD BE ADDRESSED. MOREOVER, TOO FEW ADULTS WITH LD ARE BEING IDENTIFIED AND RECEIVING APPROPRIATE INSTRUCTION AND ACCOMMODATIONS.

LD is an often misunderstood and misused term. There are several definitions of LD currently in use throughout the country, most of which cite the following characteristics included in the definition of the National Joint Committee on Learning Disabilities: LD refers to disorders that involve significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities; they are presumed to be due to central nervous system dysfunction; and they continue throughout life. LD is not to be confused with retardation or other developmental disabilities, or with sometimes co-occurring disorders such as attention deficit disorder or behavioral problems. Finally, LD is not the result of extrinsic conditions, such as cultural differences or poor instruction. Confusion about the nature and causes of LD has created myths that compound problems in identifying and serving adults with LD.

Adult educators nationwide are asking for help with students who are suspected to have LD, and a high percentage of adults at Level I of the NALS – by their own estimation – are likely to have some form of LD. The services currently mandated for students with disabilities in elementary and secondary schools were not available before 1975, when Public Law 94-142 was enacted, and most of today's adults did not have the benefit of those services.

Estimates of the number of American adults with LD range from 10-20 percent of the general population. Among adults with low levels of literacy, however, the estimates of LD are much higher - from 30 to 80 percent. Even with these high estimates, no broad-based research has been done to determine actual numbers, and many adults who may have LD are likely not to have been diagnosed. For instance, the largely female welfare population may contain many with LD, since in the past girls with LD tended to go undetected during their school years. While considerable research has been done about children with LD, little research has been done to determine and validate the most appropriate methods for identifying and serving adults with LD - both in terms of instruction and accommodations.

The NIFL's National Adult Literacy and Learning Disabilities Center made great strides over its six years of operation in raising awareness about the link between LD and adult literacy; gathering the best available research-based information into *Bridges to Practice*, a comprehensive training guide for literacy practitioners; and training trainers across the county in the use of this guide. In addition to the Center's work, the University of Kansas's Institute for Research in Learning Disabilities has developed a manual on accommodations for adults with LD – a critical need that has been overlooked and misunderstood. But much more remains to be done in terms of research, development, and training on instruction, accommodations, and advocacy if adults with LD are to have an equal chance for success in American society.

With regard to laws protecting adults with LD, several major pieces of legislation exist. One is the Individuals with Disabilities Education Act (IDEA), which replaced P.L. 94-142, and applies to young people with disabilities from birth to 21 (up to the 22nd birthday) who need special education and related services. IDEA applies not just to school age children but to young adults who do not have a regular high school diploma.

Adult education and literacy practitioners need more and better training on how to act as advocates for their students with LD by helping them get needed services through IDEA and the two other major pieces of legislation that affect this population – the Adults with Disabilities Act (ADA) and the Vocational Rehabilitation Act. One much-needed service throughout the nation is affordable diagnostic testing, which is the only legally recognized way of confirming the existence of LD. Without diagnosis, a person is not assured of getting appropriate accommodations in learning settings and on the job.

Practitioners in general need a more thorough understanding of LD in adults, the social and legal implications, and appropriate instructional strategies and materials. They need information about how to screen their students for LD and how to arrange for diagnostic testing as needed. They need to engage other community agencies and resources in serving adults with LD. Above all, they need to understand that an adult with LD does, in fact, have a disability.

CHALLENGE 5: NEW TECHNOLOGY IS PROFOUNDLY CHANGING THE WAY WE LIVE, WORK, AND LEARN. THIS TECHNOLOGY BOTH REQUIRES AND FACILITATES LIFELONG LEARNING. BUT THE ADULT EDUCATION AND LITERACY FIELD HAS NOT YET TAKEN FULL ADVANTAGE OF THE POTENTIAL TECHNOLOGY HAS FOR TRANSFORMING ADULT LEARNING.

New technology is causing fundamental changes in every sector of our society – how we communicate, do business, care for ourselves, and gain information. The impact of this virtual revolution is just beginning to be felt. With the emergence of the Internet, for example, there are at least 4 million Web sites, 800 million Web pages, \$12 billion in consumer e-commerce, 100 million U.S. users, and online traffic that doubles every 100 days. Technology has introduced new ways to share information freely and instantaneously around the globe – anywhere at any time.

The importance of information technology (IT), and of being able to use it, goes far beyond work to touch on every aspect of daily life, from health care to entertainment. The new technology is at the heart of lifelong learning, in terms of both what we have to learn and how we learn, on a continuous basis. The Conference Board of Canada quotes experts as saying that "...[t]he most successful countries of the 21st century will focus on lifelong learning; the most innovative will use learning technologies to do so...."²²

The ability to use IT effectively has become a survival skill and a critical aspect of literacy. The new information infrastructure requires a broad range of cognitive skills,

²² "Solutions for Employers: Effective Strategies for Using Learning Technologies in the Workplace," p. 24, Knowledge Review Report, The Conference Board of Canada.

including organizing, analyzing, evaluating, and using massive amounts of information in the workplace and at home, as consumers and as citizens. Adults with low literacy are not equipped to deal with IT, and not enough literacy programs are equipped to use IT for their students' benefit.

The need for access to immediate information, and the need to make timely decisions, will demand that all Americans upgrade their IT skills. And employers will require that workers have these skills to help them remain competitive in the global economy. By 2006, almost half of American workers will be employed by industries that are either IT producers or intensive users of IT. The emerging digital economy is raising the demand for highly-paid, core IT workers, creating new IT-related occupations, changing the skill requirements for many non-IT jobs, and raising the minimum skill requirements for many other jobs. In 1997, IT-producing industries added 350,000 jobs, a one-year increase of 7.7 percent as compared to average employment growth of about 3 percent. In addition, Canadian experience indicates that "...more and more employers believe that learning technologies provide a cost effective, reliable, innovative, measurable, and integrated method for training employees."²³

The only way to meet the increasing demand for education created by the new technology will be through the systematic use of the technology itself. This is especially true for adults with low basic skills. They have the most to lose if they are unable to use the new technology – in terms of jobs, educational opportunities, and quality of life on every front. They are the people most likely to end up on the wrong side of the now-infamous "digital divide." And they also stand to lose if technology is not used to help further their learning.

Information and communication technologies can have an especially important impact on expanding learning opportunities for adults who are hard to reach and attract. Technology has enormous potential to transform the field of adult education and literacy by freeing it from limitations of time and space – it has already reduced the isolation experienced by many adult literacy providers and learners. Technology is an educational tool that increases access to high-quality instructional materials and emerging research, facilitates communication between staff and learners within and among programs, streamlines administrative and reporting processes, and serves as a delivery vehicle for innovative instructional and staff development approaches.

Limited appreciation for the potential impact of technology – not to mention limited funding – prevents many programs from acquiring adequate equipment and providing critical ongoing staff development. In addition, much of the new software does not accommodate adults with disabilities. Programs and their learners need up-to-date access to the new technology, more software that has proven effective with adults, and continuous training in the use of IT. They need to understand and capitalize on the fact that technology is the key to all future reform.

²³ Same, p. 25.

CHALLENGE 6: PUBLIC SUPPORT FOR IMPROVING EDUCATION FOR OUR NATION’S YOUTH IS INCREASING, BUT WE LACK THAT SAME SUPPORT FOR IMPROVING ADULT EDUCATION AND LITERACY PROGRAMS. WE NEED TO CREATE A BETTER UNDERSTANDING OF THE IMPORTANCE OF ADULT EDUCATION AND LITERACY TO THE NATION’S WELL-BEING.

In the United States, most policymakers emphasize the importance and value of K-12 and higher education, while adult literacy education is a marginalized, under-funded and poorly appreciated component of our national educational activities. The image of the adult education system is of a “second chance” system for adults who failed to complete their secondary education, or for immigrants seeking a new beginning in the United States. Generally it is considered a “remedial” system instead of a “preventive” system – one that can help adults avert job failure, crime, poor health, limited citizenship, and their own children’s failure in school. Adult education is too often seen as a “cost” rather than the “investment” it actually is.

Awareness of adult literacy as a social and economic issue has generated some support among both the public and policymakers, but much more is needed. The recent increase in adult learner advocacy – including the creation of the learner group VALUE (Voice of Adult Literacy United for Education) – holds potential for making a substantial difference in this area. But the lack of attention persists, and the government and the public both need a better and deeper understanding of this issue. As Sticht has pointed out, “...there is practically no coverage of the system by the news media. While the K-12 and college systems are the subject of literally hundreds of news stories per year..., there are few, if any, stories about the adult literacy education system.”²⁴

Problems of low public awareness and poor communications affect learners as well. In most communities, a variety of adult learning programs are available, including nonprofit, community, and faith-based programs. Unfortunately, information about services is often not coordinated, and adults seeking referral may not have the information they need to enroll in the program best suited to their needs. This lack of coordination does not lead to the positive promotion of adult literacy needs or services.

The adult education field needs a communications strategy that drives action in behalf of more support for the field. Public awareness efforts need to be more targeted, with more specific approaches to specific audiences. And programs must do a better job of coordinating comprehensive information about available programs for the use of potential learners.

CHALLENGE 7: PROVIDING HIGH QUALITY, CONSISTENT SERVICES TO ADULT LEARNERS IS LIMITED BY A VARIETY OF CRITICAL PROGRAMMATIC FACTORS. AMONG THE MOST PRESSING ARE: A LACK OF CONSENSUS ON GOALS, SERIOUS LIMITATIONS OF STAFF TIME AND PROFESSIONAL DEVELOPMENT OPPORTUNITIES, LACK OF RESEARCH AND INFORMATION ON BEST PRACTICES, MISMATCHES BETWEEN PROGRAM STRUCTURE AND LEARNERS’ NEEDS, AND THE LACK OF ACTIVE ATTENTION TO ADULT LEARNERS AS WHOLE PEOPLE.

²⁴ Sticht, T., “The Adult Education and Literacy System (AELS) in the United States: Moving from the Margins to the Mainstream of Education,” p. 12, February 2, 2000.

The challenges to program quality listed below are all major issues in their own right. They are grouped together here because they have a direct bearing on the quality of services currently provided to adults.

No consensus exists as to what goals programs are trying to achieve. Recent efforts to identify standards for basic education – such as the Secretary of Labor’s Commission on Achieving Necessary Skills (SCANS) and the National Institute for Literacy’s EFF – have made progress in expanding the vision for the field, building consensus, and providing guidance on the specific skills and knowledge that adults need to be successful in the 21st century. Once a common vision is agreed on, curriculum that supports the learning of those skills and knowledge can be developed, along with measures of progress and assessment.

Staffing for adult education and literacy programs is a major ongoing issue, as is professional development for staff. Few full time jobs are available for adult education and literacy instructors, and those that are available offer low pay and few (if any) benefits. The overwhelming majority of paid instructional staff (87 percent) is part-time; many more workers are volunteers. Increasing the proportion of well-paid, full-time instructors is essential to improving capacity and quality in the field, and to making work in adult education an attractive professional option.

Full-time jobs will only have an impact if the people who take them are well trained. Adult educators receive only a fraction of the professional development opportunities that are regularly provided to K-12 professionals. Currently there is no pay incentive for instructors to get certification. In fact, most part-time (and some full-time) instructors sacrifice a day’s pay to participate in in-service training. Improved, expanded, and continuous training of teachers, administrators, and volunteers is essential to improving the quality of instruction. In addition, more colleges and universities need to offer degree programs in adult literacy instruction. In 1999, fewer than 100 colleges and universities nationwide offered graduate degrees in adult education and literacy.²⁵ It is essential to do a better job of training and certifying teachers and to use training methods appropriate to the adult education field, rather than simply adapt K-12 models.

Adult educator certification is a way to get beyond the minimal requirement that instructors have K-12 certificates. The national PRO-NET project has developed and field-tested teacher competencies. Their work could steer the course for some form of professional certifications in the future.

There are a number of innovative practices in adult learning, but little research evidence on what works or how successful innovation can be more systematically applied. There is a great deal of research on teaching children, which is used by some practitioners in lieu of research on teaching adults. Because of scant funding for research, there is little capacity in the form of trained researchers for adult education. Organizations like the National Center for the Study of Adult Learning and Literacy (NCSALL) and the National Center for Adult Literacy (NCAL) are making important contributions to the research

²⁵ Peterson’s Graduate Programs in Business, Health, Information Studies, Law & Social Work, 1999.

base – especially in the area of research-to-practice – but without more and better research, the development of innovative teaching and other program-related approaches will be limited. We need models for all aspects of program implementation – teaching, learning, and professional development – that are grounded in what works.

While practitioners and researchers today have a better idea of what works, overall effectiveness and participation as conceived in traditional programs remains low. For many adults, barriers to participation arise because the available learning opportunities are poorly adapted to their learning needs or the situations in which they find themselves. Adult education is generally classroom-based and instructor-led, but this is not the only appropriate way to teach adults. This type of structure was ineffective for many adults when they were in the K-12 system, and it may prevent them from seeking out continued learning opportunities. For others, this structure is too rigid to accommodate their schedules, which include work and family responsibilities. We need to initiate much greater flexibility in terms of time, place, and circumstance if we want adults to stay long enough to learn what they need to.

Finally, most adults come to literacy programs with serious needs beyond education – needs that interfere with learning. They may need child care or transportation in order to attend classes, or they may have health problems that create barriers to learning. Their work schedules may create barriers to attending classes, or their families may not be supportive of their involvement in educational programs. There may be issues of domestic violence or substance abuse. Adult educators need to collaborate with other community agencies in order to address the learner as a whole person and to help the learner find other resources necessary to support the achievement of educational goals.

Afterword

The Foundation Paper's primary aim, like that of the original paper, is to provide thought-provoking information on the history and current state of adult education in the U.S., and to lay the groundwork for action that will build a stronger field – one that can do a better job of serving adults with literacy needs. Our hope is that this revised paper will be useful to readers as a background resource for the new draft Action Agenda, which is now the primary focus of the Summit process.

The major changes in this paper were made in response to the many helpful suggestions offered by participants at the first Summit meeting in Washington, D.C. While the changes do not include all suggestions made, they attempt to reflect as many significant comments as possible.

A new section II of the paper summarizes important national actions that have been initiated over the last decade and that have changed both the field itself and the context in which the field must do its work. It also outlines the much stronger role states have assumed during that time. The paper generally tries to present some of the positive changes that have taken place and the momentum that has been created in the field. As many readers have pointed out, it's important as we move forward to draw strength from our past achievements and bear in mind the lessons we've learned

The statement of a very ambitious vision and goal for our field has been modified to delete the comparison to Sweden. The goal continues to be that 70 percent of U.S. adults score at Level 3 or above on the next National Adult Literacy Survey (NAAL). As is often the case with this issue, there was considerable debate about what would be the most appropriate goal for our field. As a result, ideas for other goals and visions for our field are being gathered and will be considered in the draft Action Agenda.

There was considerable controversy about the seven challenges listed in the original paper – whether they were the right challenges, whether they were presented correctly, and whether the paper should be structured around them. Some readers suggested combining a number of the challenges, while others suggested the deletion of some and the addition of new challenges. Because of the complexity of the feedback, the original challenges are included in the foundation paper, but they have been revised to reflect many of the suggestions about their accuracy and completeness. The draft Action Agenda used the recommendations of Summit meeting participants to construct a new, reordered set of eight “priorities” and related action steps that can move the field forward over the next decade.

Throughout the paper, changes have been made to add substantiating information, include as many citations as possible, and delete questionable or unattributable statements. For example, a stronger statement about the link between health and literacy has been included, and quotes from adult learners have been added to drive home the real-life significance of the issues described. A more explicit effort has been made to acknowledge the role of community-based programs and the funding problems they face.

Readers made several major comments that have not been dealt with in the revised paper – notably about the need for a fuller discussion of ESOL and the importance of dealing more directly with the related issues of poverty and racism. These are critical concerns that will not be overlooked in the Action Agenda and continuing Summit discussions.

The aim of the Summit process is to unite the adult education and literacy field in planning the hard work it will take to move us forward. Because of its emphasis on action, the draft Action Agenda will be the focus of continuing Summit activities. The final version of the Action Agenda is expected to form the core of the final Summit document, which will be released on or near September 8, 2000 – International Literacy Day.

We hope that this Foundation Paper provides the kind of information that gives stakeholders a firm grounding in the state of our field, and a sense of the issues that face us as we make plans for a fully enfranchised adult education and literacy system that can offer the highest quality services to all adult learners.

Sources

American Library Association Presidential Committee on Information Literacy (1989). *Final Report*. Washington, DC.

Chisman, F.P. (1989). *Jump Start: The Federal Role in Adult Literacy*. Washington, DC.

Conference Board (1999). *Turning Skills into Profit: Economic Benefits of Workplace Education Programs*. New York, New York.

Conference Board of Canada (2000). *Solutions for Employers: Effective Strategies for Using Learning Technologies in the Workplace*, Knowledge Review Report.

Comings, J., Garner, B., & Smith, C. (Eds.) (2000). *The Annual Review of Adult Learning and Literacy*. San Francisco, CA: Jossey-Bass.

Harer, M.D. (1995). *Prison Education Program Participation and Recidivism*. Federal Bureau of Prisons, Office of Research and Evaluation, Washington, DC.

Hohn, M.D. (1997). *Empowerment Health Education in Adult Literacy*. National Institute for Literacy, Washington, DC.

Lerman, R., Schmidt, S. (1999), *An Overview of Economic, Social, and Demographic Trends Affecting the US Labor Market*, Final Report, August 1999, The Urban Institute, Washington, D.C.

Lester, R.K. (1998). *The Productive Edge: How U.S. Industries Are Pointing the Way to a New Era of Economic Growth*. W.W. Norton & Co.

National Alliance of Business (1998). *The U.S. Labor Market: Getting Inside the Numbers*. *Workforce Economics* 4(3).

National Alliance of Business (1999). *U.S. Productivity: The Challenges Ahead*. *Workforce Economics*, 5(2).

National Center for Education Statistics (1993), *Adult Literacy in America: A First Look at the National Adult Literacy Survey*, Washington, DC.

National Institute for Literacy (2000). *Equipped For the Future Content Standards: What Adults Need to Know and Be Able to Do in the 21st Century*. Washington, DC.

National Institute for Literacy (1995), *Equipped for the Future: A Customer-Driven Vision for Adult Literacy and Lifelong Learning*. Washington, D.C.

National School Board Association (1999). *10 Critical Threats to America's Children: Warning Signs for the Next Millennium*. Alexandria, VI.

Organisation for Economic Cooperation and Development (1995). *Literacy, Economy and Society: Results of the first International Adult Literacy Survey*. Paris, France.

Organisation for Economic Cooperation and Development (1997). *Literacy Skills for the Knowledge Society: Further Results from the International Adult Literacy Survey*. Paris, France.

Paul, M. (1991). *When Words are Bars*. Kitchener, Ontario: CORE Literacy.

Reder, S. and Edmonston, B. (2000, in press), *Demographic change and literacy development in a decade*, Washington, D.C., National Center for Education Statistics.

Smith, M.C. (Ed.) (1998). *Literacy for the 21st Century: Research, Policy, Practices, and the National Adult Literacy Survey*.

Sticht, T.G. (1998). *Beyond 2000: Future Directions for Adult Education*. Applied Behavioral & Cognitive Sciences, Inc.

Sticht, T.G. (1999). *Research Note 12/15/99*. Applied Behavioral & Cognitive Sciences, Inc.

Sticht, T.G. (2000). *Research Note 1/11/00*. Applied Behavioral & Cognitive Sciences, Inc.

Sticht, T.G. (2000). *The Adult Education and Literacy System (AELS) in the United States: Moving From the Margins to the Mainstream*

Tyler, J., *The GED: Whom Does It Help?*, Focus on Basics, Volume 2, Issue B, June 1998.

U.S. Department of Education & Organization for Economic Cooperation and Development (1999). *How Adults Learn: Conference Report*. Washington, DC.

U.S. Department of Education, National Center for Educational Statistics (1998). *The Condition of Education 1998*. Washington, DC: GPO.

U.S. Department of Education, Office of Vocational and Adult Education (1998). *Adult Education and Literacy: Data Fact Sheet*. Washington, DC: GPO.

U.S. Department of Labor (1993), SCANS: *Secretary's Commission on Achieving Necessary Skills*, Washington, D.C.

Vermont Literacy Resource Center (1996). *Focusing on Adult Literacy is Key to U.S. Success in Information Age*. The Literacy Network News 3(1).

Wagner, D.A. & Venezsky, R.L. (1999). *Adult Literacy: The Next Generation*. Educational Researcher 28(1), 21-29.



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